City of Edmonton

HOUSING MARKET REPORT

1989

Planning and Building Department
July, 1989

90-06763/

TABLE OF CONTENTS

PAGE

INTRODUCTION 1

KEY FINDINGS 1

PART 1 - HOUSING DEMAND 2

1.1 Population Projections 2
1.2 Future Age Distribution 2
1.3 Future Household Changes 3

PART 2 - HOUSING SUPPLY 7

2.1 Housing Stock 7
2.2 New Housing Stock 7
2.3 Residential Demolitions 7
2.4 Residential Land Supply 8
2.5 Residential Servicing 8

PART 3 MARKET TRANSACTIONS/OUTCOMES 11

3.1 Real Estate Listings and Sales 11
3.2 Rental Vacancy Rate 11
3.3 Housing Costs 11
3.4 City Sector Profile 14

PART 4 - FORECASTS 23

4.1 Housing Forecast 23
4.2 Distribution of Housing Starts 26
4.3 Residential Land Supply 26
4.4 Serviced Land Supply Forecast by Sector 26

Appendix 29
Housing Data Sources 32

LIST OF FIGURES AND TABLES

PAGE

FIGURES

1 Apartment Vacancies and Absorption, 1982-1989 12
2 Housing Starts, 1982-1992 25

MAP 1 - City Sectors 15

TABLES

1.1 Population 1989-1992 2
1.2 Households in Edmonton 2
1.3 Population Projections and Age Distribution, 1982-1992 5
1.4 Household Growth 1982-1992 6
2.1 Dwelling Units by Type 7
2.2 Housing Starts 1982-1988 9
2.3 Housing Starts by City Sector, 1986-1988 9
2.4 Residential Land Supply 10
3.1 Real Estate Listings and Sales, 1982-1988 16
3.2 Edmonton Area Rental Vacancy Rate, 1982-1989 17
3.3 House Prices, 1982-1989 18
3.4 Edmonton Average Rent for Two-Bedroom Apartment, 1982-1989 19
3.5 Monthly Carrying Charges - Ownership 20
3.6 Median Household Income 1980-1988 21
3.7 City Sector Description of Housing Market Activity 22
4.1 Housing Starts Forecast By City Sector and Type 27
4.2 Inventory of Serviced Residential Land 28

A1 Household Growth, 1986-1992 30
A2 Household Distribution by Household Income, 1986 31

INTRODUCTION

This report is an examination of the present and future Edmonton housing market. Within the study, there is a focus on projections and market activity, all in relation to the City's interest in housing and residential land development.

This report has two purposes:

- to provide a consistent analysis and forecast of housing activity for use within the City of Edmonton civic administration;
- to provide housing related data to the development and building industry.

KEY FINDINGS

The new and resale housing market in Edmonton improved substantially in 1988 and forecasts indicate a continuing increase in new housing construction. The major findings of the report are presented below:

Housing Demand (1989 - 1992)

- The young adult group (20-24) will decline by 13,000 reducing demand for apartment housing.
- The middle years group (35-54) increases by 26,000 contributing to continued demand for more expensive housing.

New Housing and Land Supply

- Housing starts totalled 2,702 in 1988, up 14% from 1987.
- There is a small supply of serviced single family lots. At the end of 1988, the forecasted supply was 1.2 years.

Real Estate and Rental Market

- 1988 was the best year since 1982 for the real estate market. The sales to listings ratio increased to 60% and selling prices increased nearly 6%.
- Apartment vacancy rates decreased to 3.6% in April 1989 from 6.8% in April 1988.

Housing Starts Forecasts

- The forecast is for a continued increase in housing starts from 3,000 in 1989 to 4,500 in 1992.
- Housing starts will be concentrated in the west, southwest and southeast sectors of the city.

PART 1 - HOUSING DEMAND

Among the most significant variables affecting the demand for housing are demographic factors including population, age structure and household changes. This part of the report discusses these variables, examines household formation trends and provides a forecast of the expected number of households as a basis for the associated housing requirements.

1.1 Population Projections

The population in 1992 is forecasted to be 624,400 (see Table 1.2). This forecasted growth is slightly higher than growth during 1985 - 1989, and is due to forecasts of positive net migration over 1989 - 1992 compared with negative net-migration over 1982 - 1987, (Table 1.1).

Table 1.1 City of Edmonton Population, 1989-1992

	1989	1990	1991	1992
Population	590,800	601,200	612,400	624,400
Net Migration	3,500	4,200	4,900	5,800

Source: Planning and Development Department, City of Edmonton

1.2 Age Distribution

The population age distribution is important from a housing perspective because different age groups generally have differing housing requirements. Young adults in the 20 - 24 age group generally seek rental accommodation, while persons in the family formation years of 25 - 34 are usually in search of their first home purchase. Persons in the middle years from 35 to 54 traditionally consider a move-up in housing quality, while the 55 + groups can be "empty-nesters", seniors looking for specialized accommodation, or be non-movers (Gruen, et al, 1982, p. 17). The following table, which outlines Edmonton's households by type, illustrates the diversity of Edmonton's housing needs:

Table 1.2 Households in Edmonton

Household Type	Number	%
Single Adult	62,465	28
Two Adults	66,857	29
Multiple Adults	21,121	9
Single Adult & Child(ren)	12,258	6
Two Adults & Child(ren)	53,091	23
Multiple Adults & Child(ren)	11,758	5
Other	303	0
TOTAL	227,853	100

Source: City of Edmonton Census, May 1987

The four years 1989 to 1992 will see a continuation of the aging trend evident in the years 1982 - 1988 (see Table 1.3):

20 - 24	The young adult group decreases by 13,000.
25 - 34	The family formation group increases by 1,000.
35 - 54	The middle years group increases by 26,000.
55 +	This group increases by 10,500.

These changes in the age distribution of the population, assuming no significant economic changes, would have the following impacts on housing:

- the decline in the 20-24 age group would continue the generally soft rental market;
- the lack of growth in the 25-34 age group would not increase demand for the first-time buyer market;
- the strong growth in the 35-44 group would suggest that the move-up market has the potential for further demand increases; and
- the growth in the 55+ age group would create an ongoing demand for seniors housing.

However, as discussed below and in Section 1.3, economic conditions are expected to significantly influence these demographic considerations.

1.3 Future Household Changes

The relationship between the population/age profile and household formation can be explored by a technique which calculates the likelihood that individuals in particular age groups are the head of a household (headship rates).

A study of household formation and headship rates in Canada (Smith, 1984), found that the large increase in the number of households since 1961 was due mainly to increases in non-family households (single-person households and households of unrelated persons). This growth of non-family households was facilitated primarily by an increasing real affordability and availability of housing. Other influencing factors include an increase in the numbers of young adults and social trends such as the increase in divorce rates. Economic variables were found to influence housing demand of all age groups but were of particular impact on the youngest age group (15-24).

In view of these conclusions on the relationship between economic variables and headship rates, the City's recent economic forecasts are significant (City of Edmonton, Forecast Committee, May 1989). The key findings of the forecasts are:

- Growth of the Alberta economy over 1989-1992 will average 4.1% per year compared to 4.4% over 1985-1988.
- Edmonton's unemployment rate will average 7.7% over 1989-1992 compared to 11.0% over 1985-1988.
- Real interest rates (prime rate minus consumer price increases), over 1989-1992 will average 4.7%. The rates were even higher at 7.0% over 1985-1988.

Continued economic growth, reductions in the unemployment rate, the continuation of a high rate of family separation, and the availability of affordable housing are expected to contribute to an increase in the rate of family formation over the next several years.

These expectations are incorporated in the age-specific headship rates as projected in Table 1.4 and Appendix 1. The key features of the forecasts include:

- In the period 1989 to 1990, approximately 6,300 new households will be formed.
- In the period from 1990 to 1992 there will be an increase of approximately 6,600 households per year, and household size will decline to 2.42.

Period	Average Number of New Households Per Year
1985 - 1988	4,000
1989 - 1992	6,500

The household formulation projections from Table 1.4 and Appendix 1 are combined with an assessment of economic factors to prepare the housing starts forecast in Section 4.

Table 1.3

City of Edmonton, Population Projection and Age Distribution, 1982-1992

Age Group	Observed [1]				Projected [2]			
	1982		1986		1989		1992	
	Population	%	Population	%	Population	%	Population	%
0 - 14	106,085	19	116,344	20	123,400	21	132,300	21
15 - 19	43,461	8	40,678	7	35,000	6	35,200	6
20 - 24	78,441	14	68,334	12	54,800	9	41,500	7
25 - 34	123,651	23	129,043	23	136,500	23	137,700	22
35 - 44	66,054	12	74,635	13	87,200	15	106,100	17
45 - 54	52,913	10	52,567	9	56,300	9	63,500	10
55 - 64	40,923	7	44,933	8	47,000	8	50,900	8
65 +	39,786	7	44,972	8	50,600	9	57,200	9
TOTAL	551,314	100	,571,506	100	590,800	100	624,400	100

[1]Source: Civic Census, City of Edmonton, various years
[2]Source: Planning and Development Department, City of Edmonton, 1989. These figures are preliminary; a revision will be made to these forecasts when the 1989 civic census data is released in August 1989.

Note: Totals may not add as a result of rounding.

Table 1.4

City of Edmonton, Household Growth, 1982-1992

Age Group	Observed 1982 Population	Observed 1982 Headship Rate	Observed 1982 Households	Projected[1] 1989 Population	Projected[1] 1989 Headship Rate	Projected[1] 1989 Households	Projected[1] 1992 Population	Projected[1] 1992 Headship Rate	Projected[1] 1992 Households
15 - 24	121,902	.205	30,161	89,800	.235	21,103	76,700	.235	18,025
25 - 34	123,651	.530	63,509	136,500	.541	73,847	137,700	.542	74,633
35 - 44	66,054	.575	36,998	87,200	.582	50,750	106,100	.583	61,856
45 - 54	52,913	.593	29,757	56,300	.600	33,780	63,500	.601	38,164
55 - 64	40,923	.594	23,661	47,000	.602	28,294	50,900	.603	30,693
65 +	39,786	.608	23,649	50,600	.609	30,815	57,200	.609	34,835
TOTAL	445,229	.468	208,400	467,400	.510	238,589	492,100	.525	258,205

Source: Planning and Development Department, City of Edmonton, 1989

[1]The population figures are preliminary; a revision will be made to these forecasts when the 1989 civic census data is released in August 1989.

PART 2 - HOUSING SUPPLY

This part of the report outlines housing supply components including existing housing stock, new housing additions, housing absorptions, residential demolitions, units under construction, residential land supply and servicing activity.

2.1 Housing Stock

The growth rate in households over 1985 - 1988 (+6%) was greater than the population increase (2%), reflecting the trend towards smaller households. More households are living in single family houses. Of the 10,825 dwelling units built during the period 1984 to 1988, 91% were single family dwellings. The following table outlines Edmonton's housing stock by type.

Table 2.1 Dwelling Units by Type, 1987

Dwelling Unit Type	Occupied		Vacant/ Under. Const.	Unknown	Total (Block) Units	
	Owner	Renter			No.	%
One Unit Dwelling	93,710	15,051	1,737	862	111,360	46
Two Unit Dwelling	3,565	6,971	1,724	36	12,296	5
Multi-Unit Housing						
Tri & Four Plex	373	2,116	463	68	3,020	1
Row Housing	5,862	17,676	1,948	898	26,384	11
Collective Residence	306	7,295	1,289	477	9,367	4
Low Rise Apt <5 Flr.	1,411	46,032	3,906	1,325	52,674	21
High Rise Apt >4 Flr.	1,043	15,076	897	252	17,268	7
Other Residential	1,837	3,850	837	292	6,816	3
In Commercial Structure	91	805	248	864	2,008	1
In Other Structure	35	469	64	1,146	1,714	1
TOTAL	108,233	115,341	13,113	6,220	242,907	100

Source: PLANS Information Systems, City of Edmonton Planning and Development Department

2.2 New Housing Starts

Housing starts in 1988 totaled 2,702, (2,253 single units, 140 new row house units and 309 apartment units), a 14% increase from the 1987 total (Table 2.2). Housing starts were concentrated in the west, southwest and southeast (Table 2.3).

2.3 Residential Demolitions

A number of housing starts can be considered as replacement stock for residential demolitions.

- Demolitions in 1988 totaled 161 units of which 154 were single family units.

2.4 Residential Land Supply

The supply of vacant residential land in suburban areas is an important aspect of housing supply and is summarized in Table 2.4. City sectors are shown on Map 1.

One of the critical aspects of residential land supply is the supply of subdivided and serviced lots for single family units. This supply is becoming increasingly tight and lot prices are increasing sharply.

- At the end of 1988 there was a supply of 3,287 of serviced, single family lots city-wide. The number of serviced lots at the end of 1989 is forecasted to be 2,847; or just over one year's supply.

- The supply of subdivided and serviced lots for single family units ranges from 249 to 885 units in the various city sectors, while serviced land for multiple family housing (measured in units), ranges between 571 units and 7,500 units.

- In addition to the serviced land supply, there is a large amount of unserviced, unsubdivided land in approved Area Structure Plans. This supply can accommodate approximately 37,000 single family lots.

2.5 Residential Servicing

In addition to the supply of subdivided and serviced lots specified in Table 2.4, a number of lots for single family units are serviced each year.

- In 1988, 1,311 single family lots and land for 255 row units were serviced compared to 1,335 single lots in 1987.

- The 1988 servicing was distributed as follows: north (29%), west (29%), southwest (23%), southeast (13%), and northeast (6%).

- In 1989, approximately 1,960 single family lots are expected to be serviced. The servicing is expected to be distributed as follows: the west (29%), the southwest (20%), the southeast (25%), the north (18%), and 8% are distributed throughout the city.

Table 2.2

City of Edmonton, Housing Starts 1982 - 1988

	Single Family		Row Housing		Apartments		Total	
Year	Units	%	Units	%	Units	%	Units	% Change Over Year Previous
1982	1,811	20	1,350	15	5,950	65	9,111	-13
1983	3,003	59	682	14	1,371	27	5,056	-44
1984	1,750	93	116	6	11	1	1,877	-63
1985	1,890	96	21	1	59	3	1,970	+5
1986	1,813	95	90	5	7	0	1,910	-3
1987	2,161	91	129	6	76	3	2,366	+24
1988	2,253	83	140	5	309	11	2,702	+14

Source: Canada Mortgage and Housing Corporation.

Table 2.3

Housing Starts by City Sector, 1986 - 1988

Sector	1986	%	1987	%	1988 (estimated)	%
Northeast	80	4	89	4	135	5
North	478	26	363	15	265	10
West	456	24	492	21	496	18
Southwest	525	27	580	24	600	22
Southeast	247	13	439	19	708	26
Inner City	124	6	403	17	490	18
TOTAL	1,910	100	2,366	100	2,702	100

Source: Canada Mortgage and Housing Department

Table 2.4

City of Edmonton, Residential Land Supply[1] (in units) (At December, 1988)

City Sector (see Map 1)	(1) Subdivided and Serviced[1]	(2) Total Subdivided	(3) Approved ASPs[2] (Unserviced, Unsubdivided Land)	(5) Total
Northeast				
Single Family	249	249	6,679	6,928
Row Housing	1,206	1,206	2,308	3,514
Apartments	1,073	1,073	2,297	3,370
Total	2,528	2,528	11,284	13,812
North				
Single Family	605	605	15,558	16,163
Row Housing	257	257	8,044	8,301
Apartments	314	314	7,478	7,792
Total	1,176	1,176	31,080	32,256
West				
Single Family	753	753	856	1,609
Row Housing	728	728	472	1,200
Apartments	1,833	1,833	590	2,423
Total	3,314	3,314	1,916	5,230
Southwest				
Single Family	795	795	3,644	4,439
Row Housing	923	923	1,250	2,173
Apartments	1,606	1,606	1,619	3,225
Total	3,324	3,324	6,513	9,837
Southeast				
Single Family	885	885	10,036	10,921
Row Housing	1,225	1,225	3,406	4,631
Apartments	6,278	6,278	3,473	9,751
Total	8,388	8,388	16,915	25,303
Total (excluding Inner City)				
Single Family	3,287	3,287	36,773	40,060
Row Housing	4,339	4,339	15,480	19,819
Apartments	11,104	11,104	15,457	26,561
Total	18,730	18,730	67,710	86,440

Source: Planning and Development Department, Status of Residential Land Report, 1988

[1]Supply measured in potential dwelling units as of December 31, 1988.

PART 3 - MARKET TRANSACTIONS/OUTCOMES

A series of outcomes result from the interaction of the supply of housing and the demand by households. Key market transactions are outlined here.

3.1 Real Estate Listings and Sales

The main indications for Edmonton's housing market (price and sales to listings ratio) show growth for the years 1986 to 1988, (Table 3.1).

- 1988 was the best year for the residential real estate market since the recession in 1982. Total residential listings for 1988 were 14,831 and sales were 8,981 for a sales to listings ratio of 61% (up from 54% in 1987).

- House prices (measured by the average sales price of all dwelling units) increased 6% in 1988. The increase in 1987 was 3.5% over 1986.

3.2 Rental Vacancy Rate

The April 1989 apartment vacancy rate was 3.6% (Table 3.2), a considerable reduction from the April 1984 high of 11.4%.

The vacancy rate varied greatly across the city in April 1989 from 1.4% in the southwest to a high of 6.4% in the north central area of the city. The rental vacancy rate also varied by apartment type:

	April 1988	April 1989
Bachelor	9.0%	4.7%
One Bedroom	6.9%	4.1%
Two Bedroom	5.8%	2.8%
Three Bedroom	4.9%	3.9%

Source: Rental Market Survey, CMHC

Apartment vacancy rates rose in response to large-scale outmigration from Alberta during the years 1983 to 1987. Net-migration to the Province became positive in 1988 (5,500), thereby increasing substantially housing demand. Vacancy rates have dropped rapidly and will decline further as net-migration continues to be positive.

3.3 Housing Costs

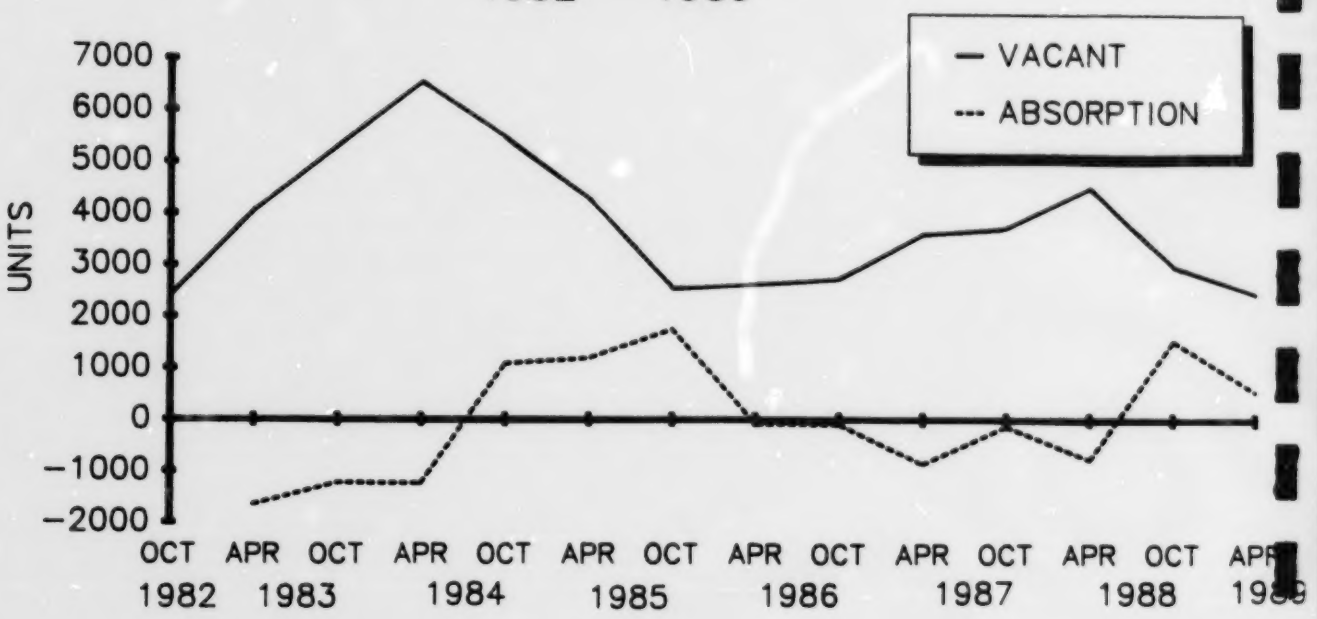
This section deals with the price of housing, both rental and ownership, the carrying costs of ownership and the relative affordability of housing compared to income.

Price of Ownership Housing

Table 3.3 shows the fluctuation in prices (current and inflation-adjusted), for two typical house types in Mill Woods and Riverbend between 1978-1988 (Royal LePage, Survey of Canadian House Prices).

FIGURE 1

EDMONTON APARTMENT VACANCIES AND ABSORPTION 1982 – 1989



Source: CMHC and The Planning and Development Department

- In nominal terms, the April 1989 price of a detached bungalow is $91,800. This is above the 1982 value of $90,000. However, in real terms (inflation-adjusted), the price has decreased 19% since 1982.

- The April 1989 price of the larger two storey house is $155,000. In real terms, this is 25% below the 1982 price of the $165,000.

Apartment Rents

Rent for an average two bedroom apartment in the Edmonton area reached a high of $496 in 1982 (Table 3.4). Rents for two bedroom apartments as of April, 1989 are now $484 per month. The average rent for other apartment types are:

	April 1988	April 1989
Bachelor	$311	315
One Bedroom	394	397
Two Bedroom	474	484
Three Bedroom	520	536

Source: Rental Market Survey, CMHC

Ownership Carrying Charges

The cost of housing discussion provides additional insights when it is expanded to include monthly carrying charges. Table 3.5 illustrates expenses and carrying charges for the Mill Woods bungalow over 1983-1989. Carrying charges include the house price, 10% down payment, mortgage insurance, mortgage rates (5 year term) and taxes.

- Monthly carrying charges for a Mill Woods bungalow in April, 1989 averaged $1,021 per month. Costs are $162 higher than in April 1988 because of higher house prices and mortgage rates.

- Carrying charges are very sensitive to interest rate fluctuations. With fixed house prices, down payment and taxes, a 1% change in interest rates causes carrying charges to increase or decrease by $53 per month on the sample house.

Affordability

This section deals with the cost of housing in relation to income. Data discussed includes median household income in Edmonton, the number of households that can afford different types of accommodation and average shelter costs.

Table 3.6 shows median household incomes in Edmonton and the Canadian consumer price index. Observations on the changes between 1980 and 1988 include:

- In nominal terms, median household income increased 20% to $30,775 in 1988.

- In real terms however, (accounting for inflation), median household income decreased by 23%.

A measure of affordability can be calculated by translating ownership or rental costs into yearly rates and assuming that 30% of the total gross income is spent on shelter.

Using this procedure, the number of Edmonton households able to afford comfortably the shelter type can be calculated as follows:

- Monthly ownership costs of $1,021 (1989 costs, see Table 3.4), would require an annual household income of approximately $40,000. (See Table A2 for the distribution of households by income). Approximately 43% of Edmonton households could afford a detached bungalow in Mill Woods. Similar calculations in 1988 revealed that nearly 50% of households could have afforded this typical dwelling; the decline in affordability results from higher house prices and mortgage rates.

- A two bedroom rental apartment costing $484 per month would require an annual household income of approximately $19,360. Approximately 74% of Edmonton households could afford this shelter, unchanged from 1988.

These figures are approximate cal tions; alternate housing preferences and financing arrangements provide a w: rray of shelter financing options. Housing is also available in Edmonton at much lower prices in the form of town houses (Castle Downs, $52,000 or Mill Woods, $49,000) condominium apartments (Castle Downs, $18,000 or Clareview, $24,000) and rental walk-ups.

In general, housing is an affordable commodity in Edmonton. However, recent house price and mortgage rate increases, combined with no growth in household incomes, have reduced affordability in some cases.

3.4 City Sector Profile

Table 3.7 summarizes housing market activity for each of the six city sectors. Map 1 outlines the boundaries of the sectors. Highlights are:

- The change in average house prices over 1988-1989 ranges between 1% to 9%.

- Housing starts in 1988 show that the southwest sector had the most starts followed by the southeast and west sectors.

- Most of the 1,311 single family lots serviced in 1988 were in the north (29%), west (27%) and southwest (24%) sectors of the city.

MAP 1

CITY SECTORS

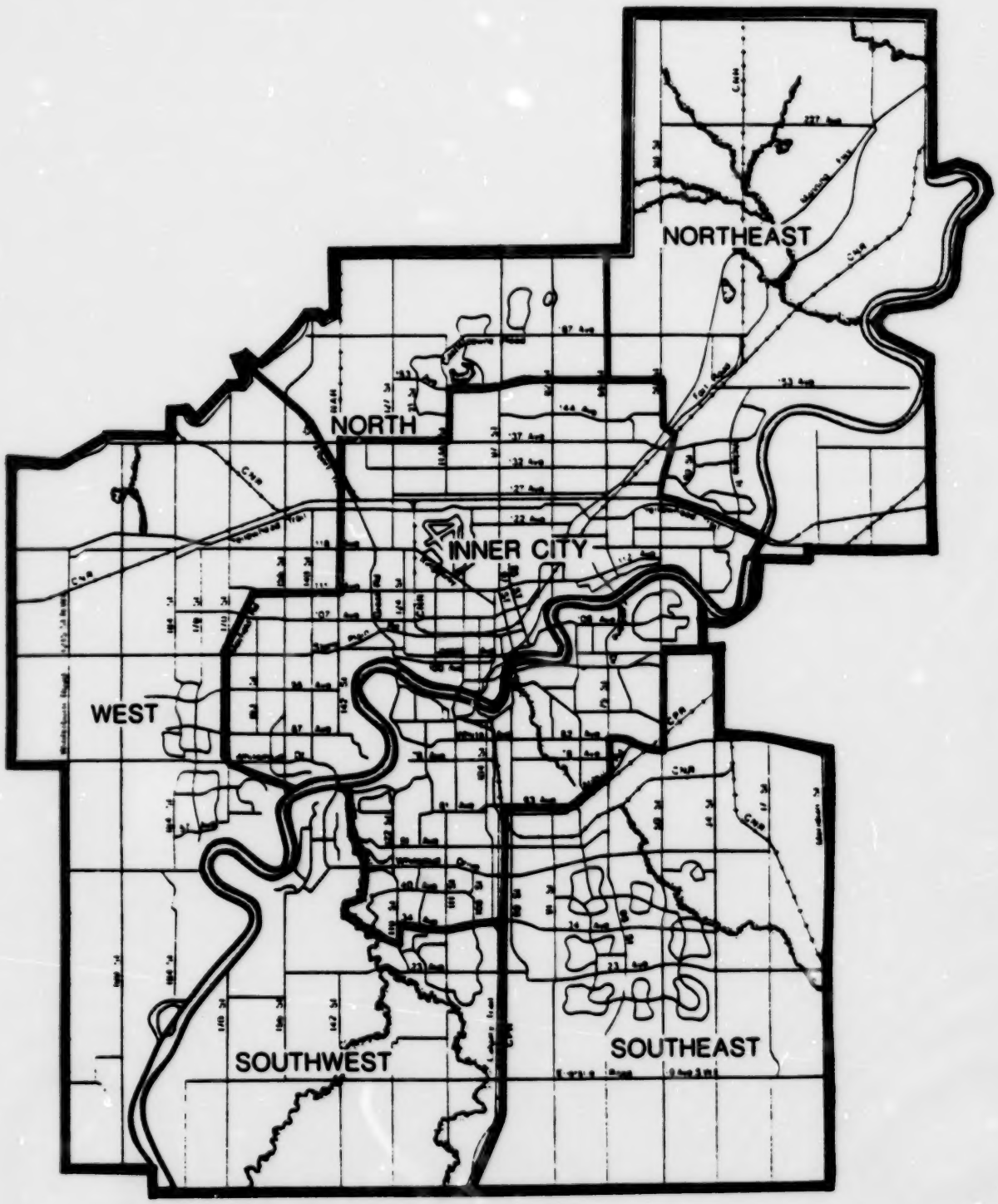


Table 3.1

City of Edmonton, Real Estate Listings and Sales, 1982-1988

Year	Listings		Sales		Sales to Listings Ratio (%)		Average Price ($)	
	Total	Single Family	Total Sales	Single Family	Total	Single Family	Total	Single Family
1982	19,451	14,934	4,873	3,772	25%	25%	91,405	98,693
1983	19,056	14,462	5,605	4,592	29%	32%	85,667	91,982
1984	17,839	14,130	5,875	5,162	33%	37%	79,246	83,183
1985	16,098	13,116	8,666	7,496	54%	57%	74,175	78,227
1986	15,757	13,157	7,846	6,667	48%	51%	74,305	79,329
1987	14,452	11,690	8,463	6,951	54%	59%	76,878	83,420
1988	14,831	12,003	8,981	7,164	61%	60%	81,841	89,723

Source: Edmonton Real Estate Board
"Multiple Listing Service" listings only

Table 3.2

Edmonton Rental Vacancy Rate, 1982-1989

Year	Month	Vacancy Rate (in percent)[1]
1982	April	3.4
	October	4.6
1983	April	7.5
	October	9.5
1984	April	11.4
	October	9.5
1985	April	7.4
	October	4.4
1986	April	4.5
	October	4.1
1987	April	5.5
	October	5.6
1988	April	6.8
	October	4.4
1989	April	3.6

Source: CMHC, Rental Market Survey

[1] CMHC survey includes privately initiated buildings containing 6 units or more.

Table 3.3

City of Edmonton, Example House Prices

		Mill Woods		Riverbend	
		Detached Bungalow[1]		Detached Two-Storey[2]	
		(Current $)	(1981 $)[3]	(Current $)	(1981 $)[3]
1982	July	90,000	80,429	165,000	147,453
1983	July	79,000	66,779	155,000	131,023
1984	July	73,500	60,643	145,000	119,637
1984	October	72,000	59,406	140,000	115,511
1985	January	70,500	57,692	135,000	110,475
1985	October	75,500	60,594	130,000	104,334
1986	January	77,000	61,014	138,000	109,350
1986	April	81,000	63,579	145,000	113,815
1987	January	78,500	60,385	140,000	107,692
1987	April	79,500	60,227	140,000	106,060
1988	January	82,500	60,930	140,000	103,397
1988	April	84,000	61,180	145,000	105,608
1989	January	87,500	62,724	150,000	107,527
1989	April	91,800	64,830	155,000	109,463

Source: Royal LePage Survey of Canadian House Prices

[1]A 3-bedroom bungalow, with one car garage, 1½ bathroom and 111 sq. metres (1,200 square feet), 5-8 years old in Mill Woods.

[2]A 4-bedroom two-storey with two car garage, 2½ bathrooms, fireplace, family room and is 186 sq. metres (2,000 square feet), 5-8 years old in Riverbend.

[3]Calculated by adjusting for inflation using the Edmonton Consumer Price Index (CPI).

Table 3.4

Edmonton Average Rent for Two-Bedroom Apartment, 1982-1989

Year	Monthly Rent ($)	Annual Rent	Required Annual Income
1982	$490	$5,880	$19,600
1983	485	5,820	19,400
1984	488	5,856	19,520
1985	453	5,436	18,120
1986	467	5,604	18,680
1987	461	5,532	18,440
1988	474	5,688	18,960
1989	484	5,808	19,360

Source: CMHC, Rental Market Survey

Table 3.5

City of Edmonton, Monthly Carrying Charges - Ownership

	1983	1984	1985	1986	1987	1988	1989
House Prices[1]	$85,000	$74,500	$70,500	$81,000	$79,500	$84,000	$91,900
Less 10% Downpayment	8,500	7,450	7,050	8,100	7,950	8,400	9,190
Mortgage Amount	76,500	67,050	63,450	72,900	71,550	75,600	82,710
High Ratio Insurance (@ 1.5%)	1,147	1,006	952	1,093	1,073	1,134	1,241
Total Mortgage Amount	77,647	68,056	64,402	73,993	72,623	76,734	83,951
Interest Rate[2]	13.25%	13.5%	12.5%	11.0%	10.5%	11.25%	12.75%
Monthly Payment[3]	$869	$774	$688	$712	$674	$752	$914
Taxes[4]	$83	$83	$88	$100	$103	$107	$107
Carrying Charge (per month)[5]	$952	$857	$776	$812	$777	$859	$1,021
Annual Required Income[6]	$35,000	$37,000	$31,000	$32,000	$31,000	$34,000	$40,000

[1]Royal Trust Survey of Canadian House Prices, (April), Mill Woods Detached Bungalow.
[2]5-Year term, (April).
[3]Amortized over 25 years.
[4]Assuming $1,285 annual taxes for 1989.
[5]Other costs such as utilities and maintenance are not included.
[6]Most mortgage lenders consider 30% of income for mortgage and taxes a maximum for housebuyers.

Table 3.6

City of Edmonton, Median Household Income 1980-1988

Year	Median Income (current $)[1]	% Change	Consumer Price Index[2]	% Change	Median Income (1981 $)
1980 (Actual)	25,748	-	88.9	-	28,962
1981	-	-	100	12	
1982	-	-	110.8	11	
1983	-	-	117.2	6	
1984	-	-	120.4	4	25,789
1985 (Actual)	30,259	2.8	124.3	3	24,343
1986 (e)	30,259	0.0	128.3	3	23,584
1987(e)	30,440	0.6	133.7	4	22,767
1988 (e)	30,775	1.1	137.3	3	22,414

1 Income for 1980, 1985, 1988 based on data supplied by statistics Canada.
1987, 1988 estimate based on the increase in average weekly earnings for Edmonton residents.

2 Statistics Canada, Annual Average Index, all items

Table 3.7

City of Edmonton, City Sector Description of Housing Market Activity

Description	Inner City	Northeast	North	West	Southwest	Southeast
Average Sales Price 1989[1] (May) (Detached bungalow)	N/A	$88,600	$N/A	$103,600	$103,600	$95,400
Percentage Change 1988-1989	N/A	5	N/A	10	2	11
Housing Starts 1988						
Single/Semi	-	135	265	285	578	631
Row Housing	-	-	-	37	22	77
Apartments	-	-	-	174	-	-
Total	490	135	265	496	600	708
Share of 1988 housing starts	18%	5%	10%	18%	22%	26%
Vacant Single Lots[2] (December, 1988)	N/A	249	605	753	795	885
1988 Single Family lot servicing	-	101	349	330	288	136

1 Edmonton Real Estate Board
2 Subdivided and serviced lots for single family residential units Status of Residential Land Report, 1988.

PART 4 - FORECASTS

This part of the report presents housing forecasts and highlights key study findings and implications.

4.1 Housing Forecast

This report uses two methods to forecast housing starts:

(i) headship rates as influenced by economic forecasts (Section 1.3); and

(ii) an econometric model for forecasting housing starts (City of Edmonton, Planning and Development Department, 1987).

The two different methods are used because of their complementary nature. The headship method provides only a total starts forecast based on a combination of demographic and economic forecasts. The econometric model provides forecasts of total, multi-family and single family starts with a specific, quantified relationship to selected economic variables.

Based on a comparison of the forecasts from the two methods and a subjective assessment of the factors influencing housing starts, a preferred forecast is identified.

Method 1: Headship Rates Influenced by Economic Conditions

The headship rate forecasts discussed in Section 1.3 (and presented in detail in Appendix 1) provide the following forecast of household growth (rounded to the nearest 100):

Year	Increase in Households
1989	6,333
1990	6,295
1991	6,456
1992	6,865

Increases in the number of households though, will not result in an equivalent number of housing starts because a certain amount of household growth is accommodated by the existing housing market. Households (defined as an occupied dwelling unit) either rent or own housing and growth in the number of households will include both renter and owner households. Growth in renter households during 1989 can largely be accommodated by the existing stock of apartments and other rental accommodation such as row housing and basement suites in houses. Increases in owner single family households, though, will require housing starts because there is virtually no inventory of vacant ownership housing.

A forecast of single family housing starts based on increases in the number of new households was derived using data from the City of Edmonton Census. The number of single family housing starts expected as a result of growth in the number of households is outlined in the table below:

Year	Household Increase	Single Family Renter Households	Single Family Owner Households	Single Family Housing Starts
1989	6,333	426	2,654	3,080
1990	6,295	423	2,639	3,062
1991	6,456	434	2,706	3,140
1992	6,865	462	2,874	3,336

Method 2: Econometric Model for Housing Starts

The second method forecasts single family, multiple family and total starts based on causal relationships between housing starts and economic factors. An econometric model of the Edmonton economy (City of Edmonton, Planning and Building Department, 1986), forecasts selected economic variables including housing starts. A series of econometric equations were developed and tested to determine the degree to which selected economic variables explained housing starts activity.

The variables, which are described below, are also specified by the model:

i) total housing starts in Edmonton are largely determined by the current real mortgage rate, apartment vacancy rates from the previous year, and by real new house prices (from two years previous);

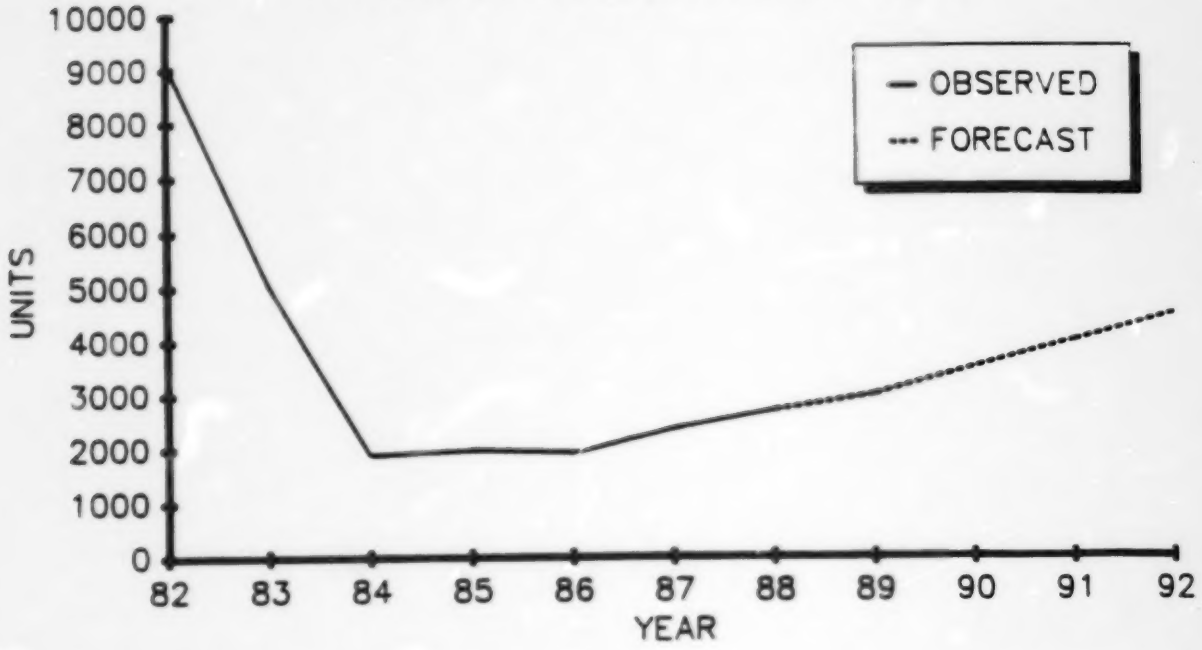
ii) single family starts are influenced most strongly by the real mortgage rate for the previous year, by changes in the current year's real price of new housing, and the inventory of newly-completed and unoccupied houses from the previous year; and

iii) multi-family starts were calculated as the difference between total starts and single family starts (City of Edmonton, Planning and Building Department, 1986).

When the economic forecasts variables for Alberta and Edmonton (City Forecast Committee, 1988) are inserted into the econometric equations, the following forecasts resulted:

Year	Single Family Starts	Multi-family Starts	Total Starts
1989	2,382	446	2,828
1990	2,415	787	3,202
1991	2,747	519	3,266
1992	2,661	875	3,536

FIGURE 2
HOUSING STARTS, 1982–1992



Source: Table 2.1 and Table 4.2

In examining the outputs from the econometric model, the increase in total starts appears to be low when compared with starts growth in 1987 and 1988 - a period with weaker growth factors than is forecast for 1989-1992. Demographic growth also influences housing starts and the household forecasts discussed earlier indicates a stronger demand for housing, particularly single family housing than indicated by the econometric model.

Preferred Housing Starts Forecasts

A preferred forecast of housing starts incorporating both demographic and economic variables is as follows (Table 4.1, Figure 2):

Year	Forecast	Rationale
1989	3,000	The growth factors are positive net-migration, rising house prices, lower vacancy rates and firmer oil prices. The impact of these variables though, is limited by high mortgage rates.
1990	3,500	Housing starts increase as economic growth continues, net-migration remains positive and mortgage rates drop.
1991	4,000	Continued growth in economic and demographic variables increase housing starts.
1992	4,500	The maintenance of growth factors increases housing starts

4.2 Distribution of Housing Starts

Housing starts in 1988 continued at high levels in the southwest, west and southeast sectors of the city. Activity is expected to continue at high levels in these areas (Table 4.2).

There has also been a distinct shift away from apartment and ground related multiple starts to single family/semi-detached starts (83% of total starts in 1988). This emphasis is expected to continue in 1989 and 1990 with more apartments and ground related multiples appearing in the 1991 - 1992 period.

4.3 Residential Land Supply

The supply of serviced residential land at the end of 1989 (outlined in Section 2.4), is adequate to satisfy 1.1 years demand for single family units at 1989 forecasted absorption rates (Table 4.2). The total supply of residential land (serviced and unserviced) in approved and authorized Area Structure Plans is sufficient to meet demand for single family units for over 20 years. The supply of serviced land for row housing units is adequate for 14 years' demand and the supply of serviced land for apartment units in excess of 20 years demand.

4.4 Serviced Land Supply Forecast by Sector

At forecasted growth rates, the supply of subdivided and serviced lots for single family units in different sectors of the city ranges from 0.7 years in the southwest to 1.5 years in the north (See Table 4.2). This supply is adequate through 1989, although conditions may be tight in some sectors. At forecasted growth rates and present servicing rates, it can be expected that an increase in servicing rates in single family units will be required in each section by 1990.

Table 4.1

City of Edmonton, Housing Starts Forecast by City Sector and Type

Sector[1]	1986	1987	1988	1989	1990	1991	1992
Inner City	124	403	490	360	280	360	450
Northeast	80	89	135	120	140	160	180
North	478	363	265	420	525	600	675
West	456	492	496	600	840	1,040	1,260
Southwest	525	580	600	780	910	1,000	1,080
Southeast	247	439	708	720	805	840	855
Total	1,910	2,366	2,702	3,000	3,500	4,000	4,500
Housing Type							
Single Family	1,813	2,161	2,253	2,400	2,600	2,800	3,100
Row Housing	90	129	140	300	450	600	700
Apartments	7	76	309	300	450	600	700
Total	1,910	2,366	2,702	3,000	3,500	4,000	4,500

Source: Planning and Development Department, 1989

[1]Actual distribution for 1986 - 1987, estimated distribution for 1988, forecasted distribution for 1989 to 1992. See Map 1 for Sector definition.

Table 4.2

City of Edmonton, Inventory of Serviced Residential Land
At the end of 1989
(in years)

City Sector	Year-end Supply 1989[1]	Supply of Subdivided and Serviced Lots in Years[2]
NORTHEAST		
Single Family	141	1.3
Row Housing	1,194	+20
Apartments	1,073	+20
NORTH		
Single Family	577	1.5
Row Housing	215	5
Apartments	314	+20
WEST		
Single Family	773	1.4
Row Housing	668	11
Apartments	1,833	+20
SOUTHWEST		
Single Family	493	0.7
Row Housings	845	11
Apartments	1,606	+20
SOUTHEAST		
Single Family	737	1.1
Row Housing	1,153	16
Apartments	6,278	+20
CITY (excluding Inner City)		
Single Family	2,721	1.1
Row Housing	4,075	14
Apartments	11,104	+20

Source: Residential Land Report, 1988, Planning and Development Department.

[1]Calculated by taking the 1988 year end supply, adding 1989 forecasted servicing and subtracting 1989 forecasted housing starts.
[2]Calculated by dwelling type by dividing the potential units on subdivided and serviced lots by the forecast of housing starts by sector by type for 1989 (Table 4.2).

APPENDIX

Table A1

City of Edmonton
Household Growth, 1986 - 1992

Age Group	1986 Population	1986 Headship Rate	1986 Households	1987 Population	1987 Headship Rate	1987 Households	1988 Population	1988 Headship Rate	1988 Households
15-24	109,012	0.235	25,618	104,348	0.235	24,522	96,400	0.235	22,654
25-34	129,043	0.539	69,554	129,368	0.541	69,988	133,100	0.541	72,007
35-44	74,635	0.581	43,363	77,735	0.582	45,242	81,900	0.582	47,666
45-54	52,567	0.599	31,488	53,620	0.600	32,172	54,400	0.600	32,640
55-64	44,933	0.601	27,005	45,491	0.602	27,386	46,000	0.602	27,692
65+	44,972	0.609	27,388	46,883	0.609	28,552	48,600	0.609	29,597
TOTAL	455,162	0.493	224,415	457,445	0.498	227,861	460,400	0.504	232,256
INCREASE	5,786		4,666			3,446			4,395

Age	1989 Population	1989 Headship Rate	1989 Households	1990 Population	1990 Headship Rate	1990 Households	1991 Population	1991 Headship Rate	1991 Households
15-24	89,800	0.235	21,103	83,800	0.235	19,693	79,600	0.235	18,706
25-34	136,500	0.541	73,847	138,600	0.541	74,983	139,000	0.541	75,199
35-44	87,200	0.582	50,750	93,400	0.582	54,359	99,900	0.582	58,142
45-54	56,300	0.600	33,780	58,000	0.600	34,800	60,100	0.600	36,060
55-64	47,000	0.602	28,294	48,200	0.602	29,016	49,500	0.602	29,799
65+	50,600	0.609	30,815	52,600	0.609	32,033	54,900	0.609	33,434
TOTAL	467,400	0.510	238,589	474,600	0.516	244,884	483,000	0.520	251,340
INCREASE			6,333			6,295			6,456

Age	1992 Population	1992 Headship Rate	1992 Households
15-24	76,700	0.235	18,025
25-34	137,700	0.542	74,633
35-44	106,100	0.583	61,856
45-54	63,500	0.601	38,164
55-64	50,900	0.603	30,693
65+	57,200	0.609	34,835
TOTAL	492,100	0.525	258,205
INCREASE			6,865

Source: Planning and Development Department, July 1989.

Table A2

Household Distribution by Household Income 1985

Household Income	Number of Households	% of Total
Under $5,000	11,055	5.0
$5,000 -9,999	19,915	9.1
10,000-14,999	18,730	8.6
15,000-19,999	20,910	9.6
20,000-24,999	19,545	8.9
25,000-29,999	18,145	8.3
30,000-34,999	17,965	8.2
35,000-39,999	16,150	7.4
40,000-49,999	27,780	12.7
50,000 and over	48,620	22.2
	218,820	100.0

Source: Statistics Canada, 1986 Canada Census

HOUSING DATA SOURCES

SOURCE	DATA
1. Canada Mortgage and Housing Corporation	Housing Statistics Report (Monthly) - housing starts, under construction, completions, absorption rates and inventory of newly completed and unoccupied units Rental Vacancy Survey (Semi-Annually) - rental vacancy rates and average rental prices
2. Statistics Canada	Census Data (Every 5 Years): - head of household by age cohort - family/non-family households New House Price Index (Monthly) - index of the price of new housing by land and building components
3. City of Edmonton	Status of Residential Land Report (Annually): - building permits issued - inventory of vacant lots at various stages of development by neighbourhood Edmonton Demographic Indicators 1987 (Periodically) - detailed population data for the 608 census enumeration areas - population projections including age distribution for Edmonton to the year 2001 - migration, birth and death rates Residential Population Densities in Edmonton (Periodically): - persons per dwelling unit data for each land use districts by unit type City Forecast Committee (Periodically) - forecast of major economic and social indicators for Edmonton and Alberta

		An Edmonton Housing Market Model (Research Paper No. 10) - an econometric model of housing starts in Edmonton Residential Staging Information, (Annually) - evaluates the supply of and demand for residential land by sector of the City
4.	Gruen, et. al.	Demographic Changes and Their Effects on Real Estate Markets in the 1980's. Urban Land Institute, Washington, D.C., 1982.
5.	Royal LePage	Survey of Canadian House Prices (Quarterly): - average price data for several housing types in several neighbourhoods of Cities across Canada
6.	Edmonton Real Estate Board	Multiple Listing Service Data (Monthly): - detailed listings, sales price and sales type data for MLS
7.	Lawrence Smith	'Household Headship Rates, Household Formation, and Housing Demand in Canada' Land Economics, Vol. 60, No. 2, May, 1984